



# The Free Basic Water Policy of South Africa

## – An evaluation of its implementation

Dissertation presented for the Degree of  
Master in Civil Engineering



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Under supervision of Associate Professor Ulrike Rivett

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University of Cape Town

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## Acknowledgements

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## 6. CONCLUSIONS

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## Works Cited



## i. Glossary of Terms

Acronym/Abbreviation	Meaning
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)†°7	) † ° 7
)†j	) † j
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7†h	7 " † h
8)h	8 ) h
8-°k	8 - ° k
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Mh@	M h @
@-o°	@ U - o
Qo	O o
U@8	U @ 8
Vk†	V k †
V†°	V † °
V†o°	V † o °
k)h	k ) h
yV	y V
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†@°	† @ ° o
†k#	† k #
†o°	† o °
†oV@	† o V @ o
†oh	† o h

## ii. List of Tables:

**Table 1:**  $\frac{7}{8} \pm h^8$   $\frac{o}{O}$

**Table 2:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 3:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 4:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 5:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 6:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 7:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 8:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 9:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 10:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 11:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 12:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 13:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 14:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 15:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 16:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

**Table 17:**  $\frac{1}{2} \pm h^8$   $\frac{o}{O}$

### iii. List of Figures

Figure 1:	h	7" ‡ h																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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## 1. INTRODUCTION

### 1.1. Background to the Development of the Free Basic Water Policy (FBWP)

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## 2. THE APARTHEID LEGACY AND THE NEED FOR FREE BASIC WATER

Under apartheid, the government's policy was to provide water services to white and coloured communities, while black communities were largely excluded. This policy of racial segregation in water services was a direct result of the apartheid system, which aimed to maintain white supremacy and control over land and resources. The government's failure to provide basic water services to black communities was a major factor in the social and economic inequalities that existed in South Africa during the apartheid era.

The apartheid government's policy of racial segregation in water services was a direct result of the apartheid system, which aimed to maintain white supremacy and control over land and resources. The government's failure to provide basic water services to black communities was a major factor in the social and economic inequalities that existed in South Africa during the apartheid era.

### 2.1. Water service delivery and income inequalities before 1994

Before 1994, water service delivery in South Africa was characterized by significant inequalities. The apartheid government's policy of racial segregation in water services was a direct result of the apartheid system, which aimed to maintain white supremacy and control over land and resources. The government's failure to provide basic water services to black communities was a major factor in the social and economic inequalities that existed in South Africa during the apartheid era.

The apartheid government's policy of racial segregation in water services was a direct result of the apartheid system, which aimed to maintain white supremacy and control over land and resources. The government's failure to provide basic water services to black communities was a major factor in the social and economic inequalities that existed in South Africa during the apartheid era.

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## 2.2. Implementation of pro-poor policies for growth and redistribution

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## 2.3. Improvements in basic services since 1994

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## 2.4. Recovering the costs of improved services to the poor

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## 2.5. Cost recovery methods used in South Africa

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### 3. THE DEVELOPMENT OF THE FREE BASIC WATER POLICY (FBWP)

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### 3.1. The goals and standards of FBWP implementation

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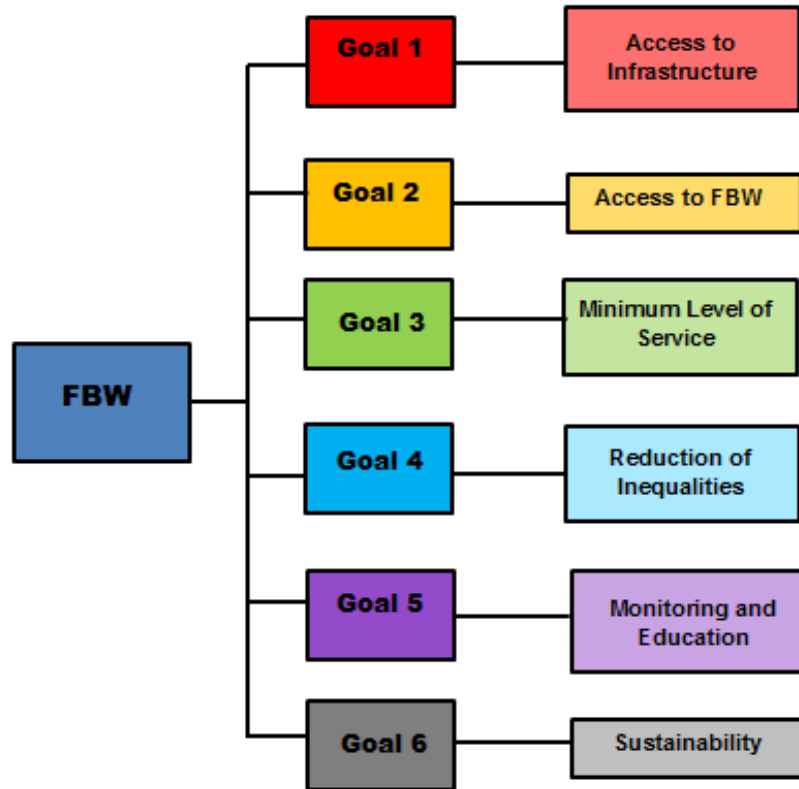
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*Figure 1: Primary goals of the FBWP*

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Table 1: Summary of FBWP Goals and Standards from the Legislature

GOAL		STANDARD	REFERENCE
1. Access to Infrastructure		Access to infrastructure	Access to infrastructure
2. Access to FBW		Access to FBW	Access to FBW
3. Level of Service	Minimum accessibility	Minimum accessibility	Minimum accessibility
	Assured supply	Assured supply	Assured supply
	Clean and safe to drink	Clean and safe to drink	Clean and safe to drink
	Minimum basic quantity	Minimum basic quantity	Minimum basic quantity
4. Reduce Inequalities		Reduce Inequalities	Reduce Inequalities
5. Monitoring and Education		Monitoring and Education	Monitoring and Education
		Monitoring and Education	Monitoring and Education
6. Sustainability of Service		Sustainability of Service	Sustainability of Service



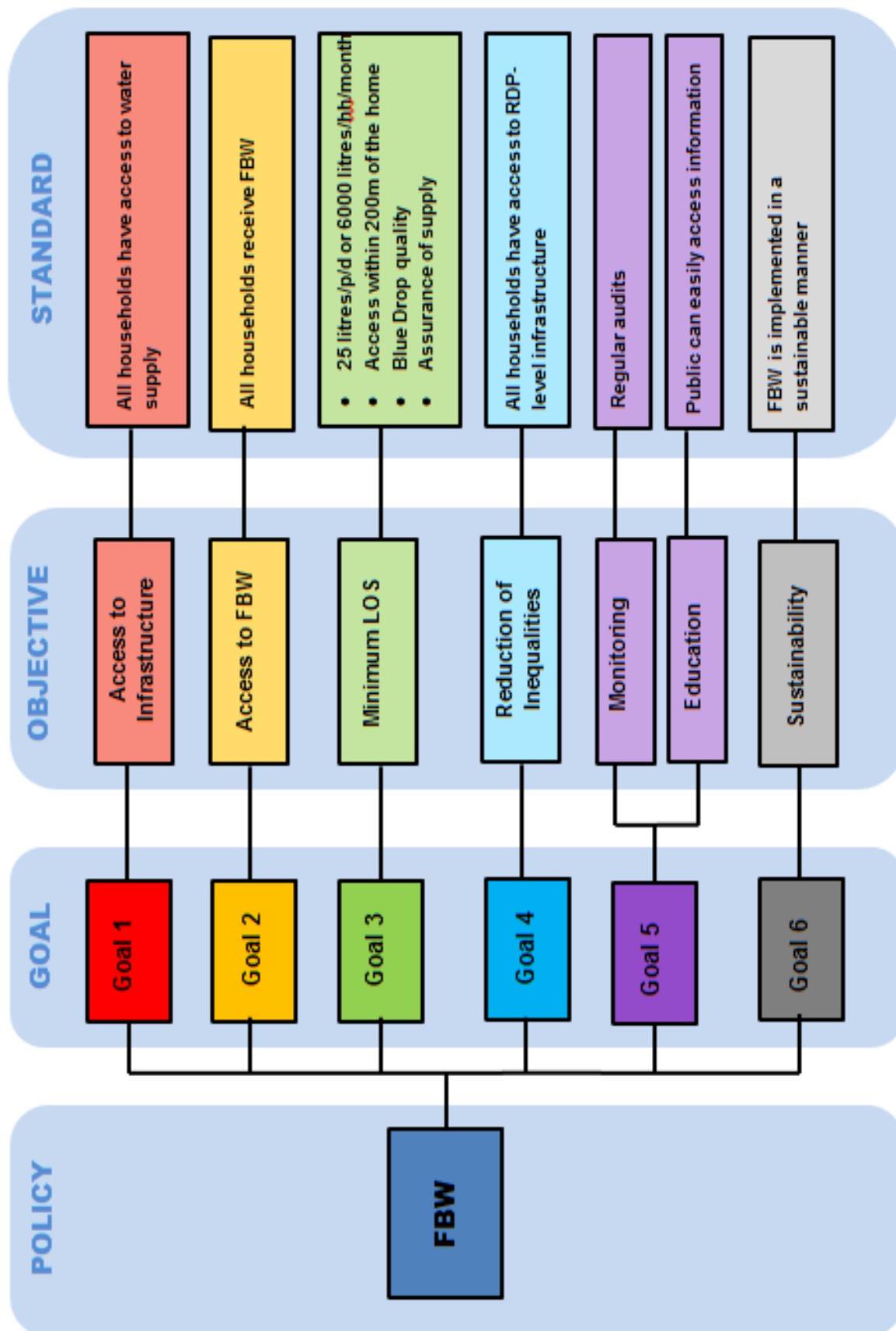


Figure 2: Summary of FBW Goals and Standards

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## 4 RESEARCH METHODOLOGY

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***"Is the FBWP achieving its implementation goals?"***

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**Table 2: Data required to answer the research question**

Goal	Data Required
Goal 1: Access to Infrastructure	<ul style="list-style-type: none"> <li>• Access to infrastructure</li> <li>• Access to infrastructure</li> <li>• Access to infrastructure</li> <li>• Access to infrastructure</li> </ul>
Goal 2: Access to FBW	<ul style="list-style-type: none"> <li>• Access to FBW</li> <li>• Access to FBW</li> </ul>
Goal 3: Minimum Level of Service	<ul style="list-style-type: none"> <li>• Access to service</li> <li>• Access to service</li> <li>• Access to service</li> <li>• Access to service</li> </ul>
Goal 4: Reduction of Inequalities	<ul style="list-style-type: none"> <li>• Access to service</li> <li>• Access to service</li> <li>• Access to service</li> </ul>
Goal 5: Monitoring and education	<ul style="list-style-type: none"> <li>• Access to service</li> <li>• Access to service</li> </ul>
Goal 6: Sustainability	<ul style="list-style-type: none"> <li>• Access to service</li> </ul>

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**Table 3: Sources of information**

Source	Reference
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)	<ul style="list-style-type: none"> <li>•Á ) <i>Free Basic Water.</i></li> <li>•Á ) <i>U</i></li> <li>•Á ) <i>Blue Drop Report 2009: South African Drinking Water Quality Management Performance.</i></li> <li>•Á ) <i>Draft White paper on Water Services.</i></li> <li>•Á ) <i>Free Basic Water Implementation Strategy 2007: Consolidating and Maintaining.</i></li> <li>•Á ) <i>Reports and Strategic Plans.</i></li> <li>•Á ) <i>Strategic Framework for Water Services.</i></li> </ul>
o	<ul style="list-style-type: none"> <li>•Á o <i>Income and Expenditure of Households 2010/2011.</i></li> <li>•Á o <i>Monthly Earnings of South Africans 2010.</i></li> <li>•Á o <i>National and Provincial Labour Market: Youth - Q1 2008 to Q1 2014.</i></li> <li>•Á o <i>Poverty Profile of South Africa: Application of the Poverty Lines on the LCS 2008/2009.</i></li> <li>•Á o <i>Census 2011.</i></li> </ul>
8	•Á 8 <i>Consolidated General Report of the National and Provincial Audit Outcomes.</i>
#o	•Á #o <i>The state of municipal infrastructure in South Africa and its operation and maintenance: an overview.</i>

<p>© - 0°</p>	<p>• Á © - 0° <i>Development of a South African version of the International Infrastructure Manual: Scooping Report.</i> © - 0°</p>
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5. ACHIEVING IMPLEMENTATION GOALS – FINDINGS AND DISCUSSION

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5.1. Goal 1: Access to infrastructure

**GOAL 1: Access to Infrastructure:**

- Á 100% rudimentary supply by 2008,
- Á 100% RDP Standard by 2014

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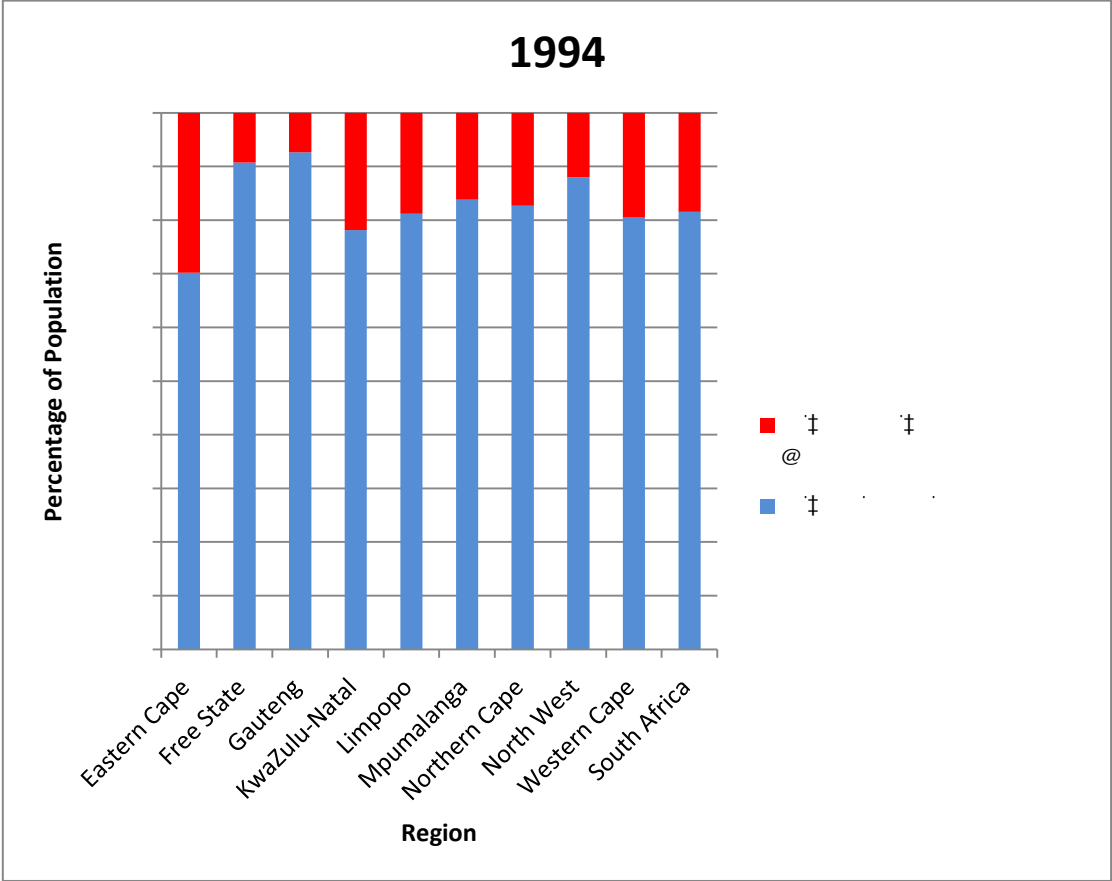
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Table 4: Percentage of population with and without access to water in South Africa in 1994 (after Department of Water Affairs, 2012b)

Region	% With water infrastructure	% Without Water Infrastructure
Eastern Cape	70%	30%
Free State	91%	9%
Gauteng	93%	7%
KwaZulu-Natal	78%	22%
Limpopo	81%	19%
Mpumalanga	84%	16%
Northern Cape	83%	17%
North West	88%	12%
Western Cape	80%	20%
South Africa	82%	18%





**Figure 3: Percentage of the population per province with and without access to water in 1994**

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**Table 5: Population with and without access to water in South Africa in 2012** (after Department of Water Affairs, 2012b)

Region	% With water infrastructure	% Without Water Infrastructure
Eastern Cape	.	.
Free State	.	.
Gauteng	.	.
KwaZulu-Natal	.	.
Limpopo	.	.
Mpumalanga	.	.
Northern Cape	.	.
North West	.	.
Western Cape	.	.
<b>South Africa</b>	.	.

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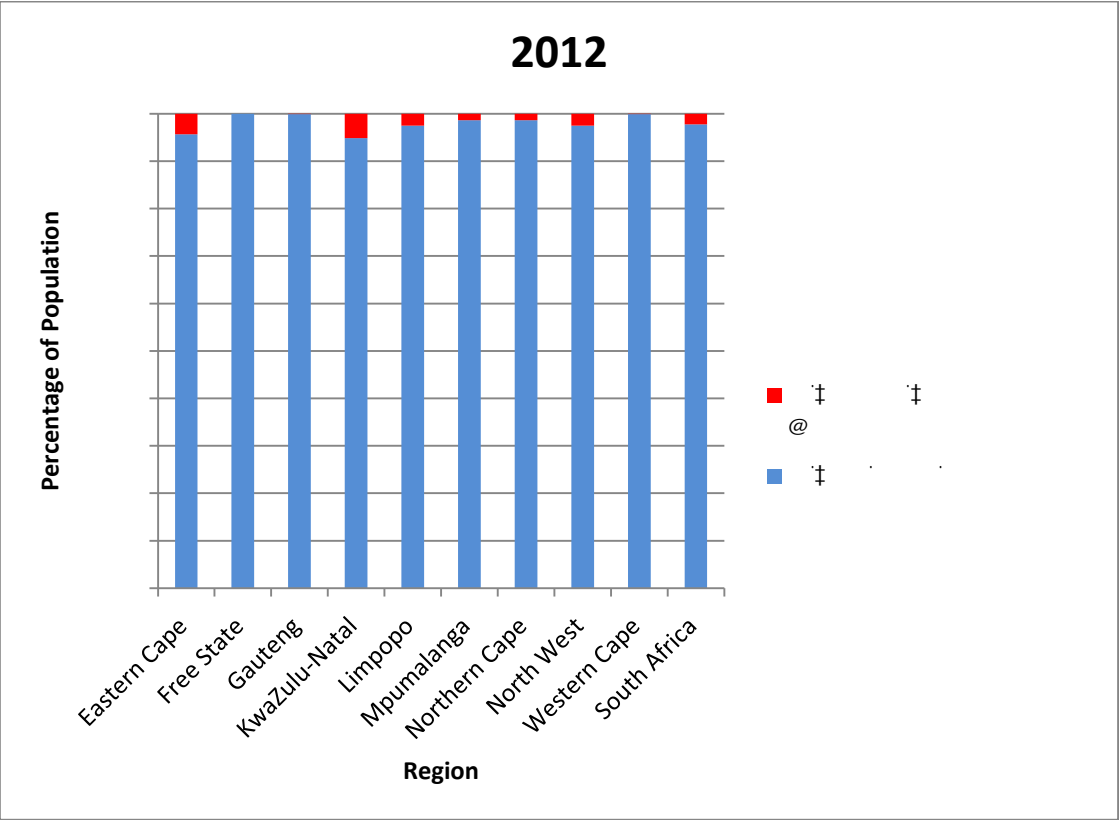


Figure 4: Percentage of population per province with and without access to water in 2012

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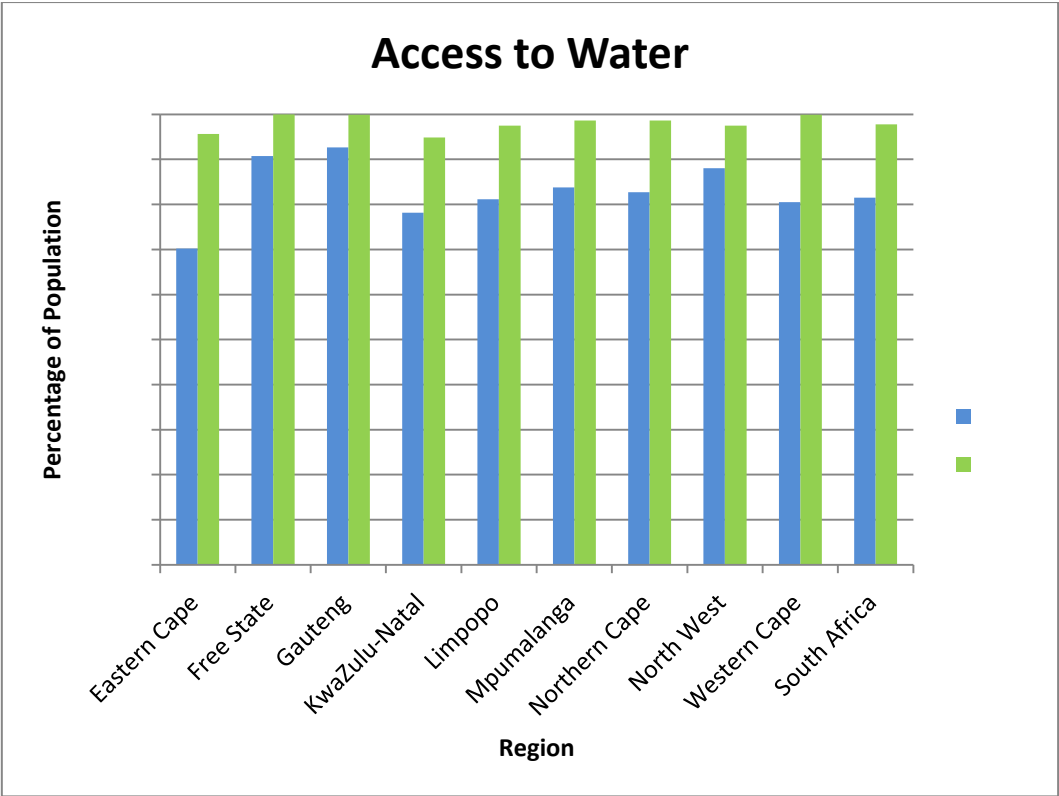


Figure 5: Percentage of population per province with access to water in 1994 and 2012

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## 5.2. Goal 2: Access to Free Basic Water

### GOAL 2: Access to FBW:

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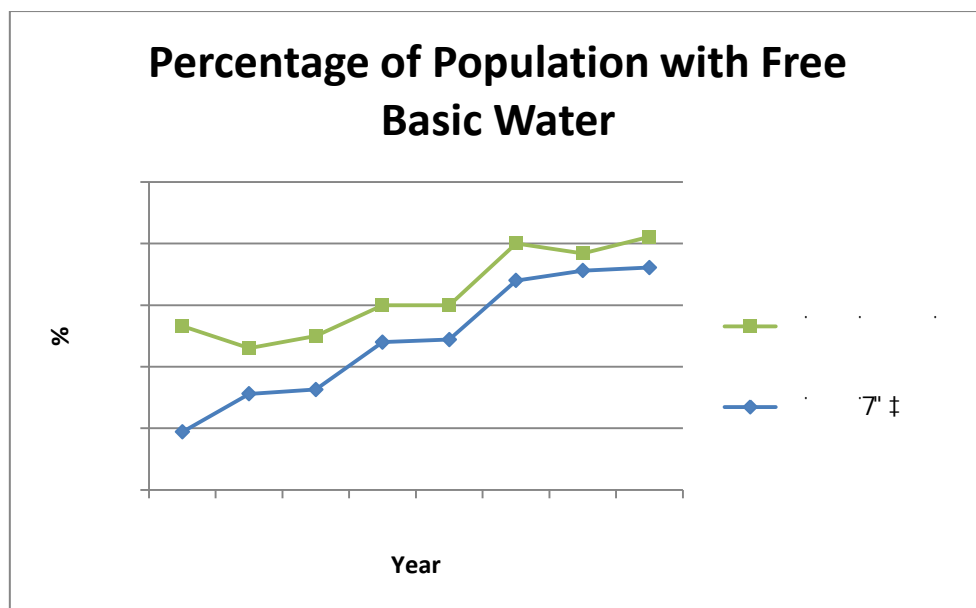
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**Figure 6: Percentage of Population with Access to FBW** (after Department of Water Affairs and Forestry Annual Reports 2003-2010)

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### 5.3. Goal 3: Level of service

GOAL 3: Level of Service:	.....
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### 5.3.1. Access to water at RDP standards

**Goal 3.1: RDP Standards:**

**Minimum Accessibility:**

- Access to water supply
- Access to water supply

**Assured supply:**

- Access to water supply

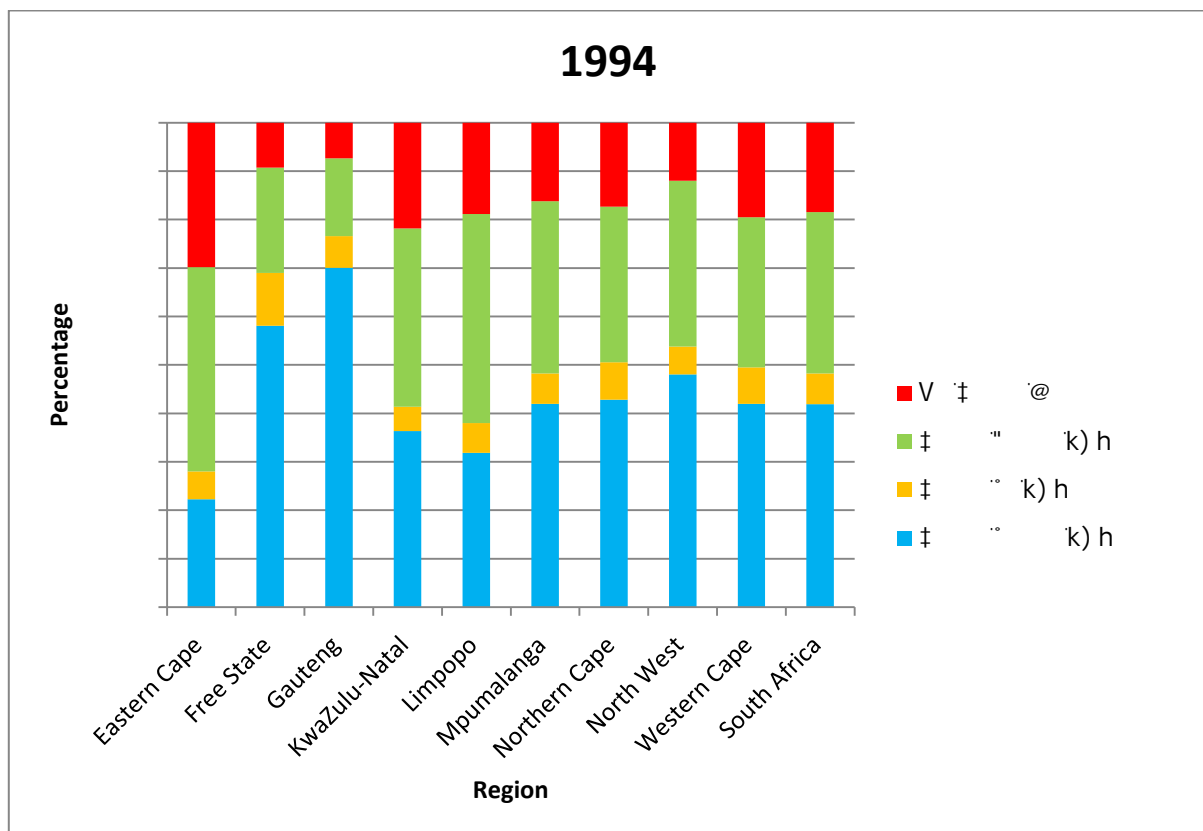
Table 6: Percentage of population with access to water by LOS in 1994

Region	No Water Infrastructure	Water Below RDP	Water At RDP	Water Above RDP
Eastern Cape				
Free State				
Gauteng				
KwaZulu-Natal				
Limpopo				
Mpumalanga				
Northern Cape				
North West				
Western Cape				
<b>South Africa</b>	<b>18%</b>	<b>33%</b>	<b>6%</b>	<b>42%</b>

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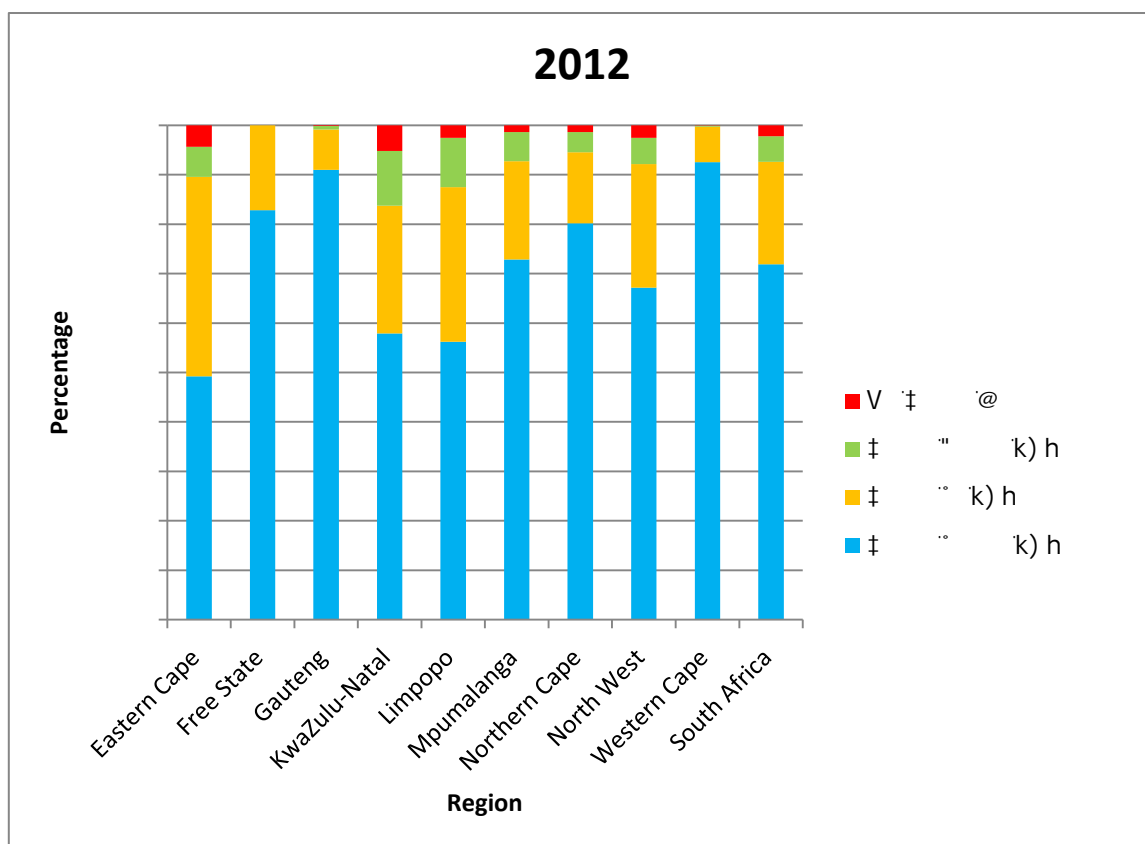




**Table 7: Percentage of population with access to water by LOS in 2012**

Region	No Water Infrastructure	Water Below RDP	Water At RDP	Water Above RDP
Eastern Cape				
Free State				
Gauteng				
KwaZulu-Natal				
Limpopo				
Mpumalanga				
Northern Cape				
North West				
Western Cape				
<b>South Africa</b>	<b>2%</b>	<b>5%</b>	<b>21%</b>	<b>72%</b>

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**Figure 8: Graph showing access to water infrastructure in South Africa in 2012**

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**Table 8: Percentage of South African population with access to different levels of water services** . . . . .  
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Year	No Water Infrastructure	Water Below RDP	Water At RDP	Water Above RDP

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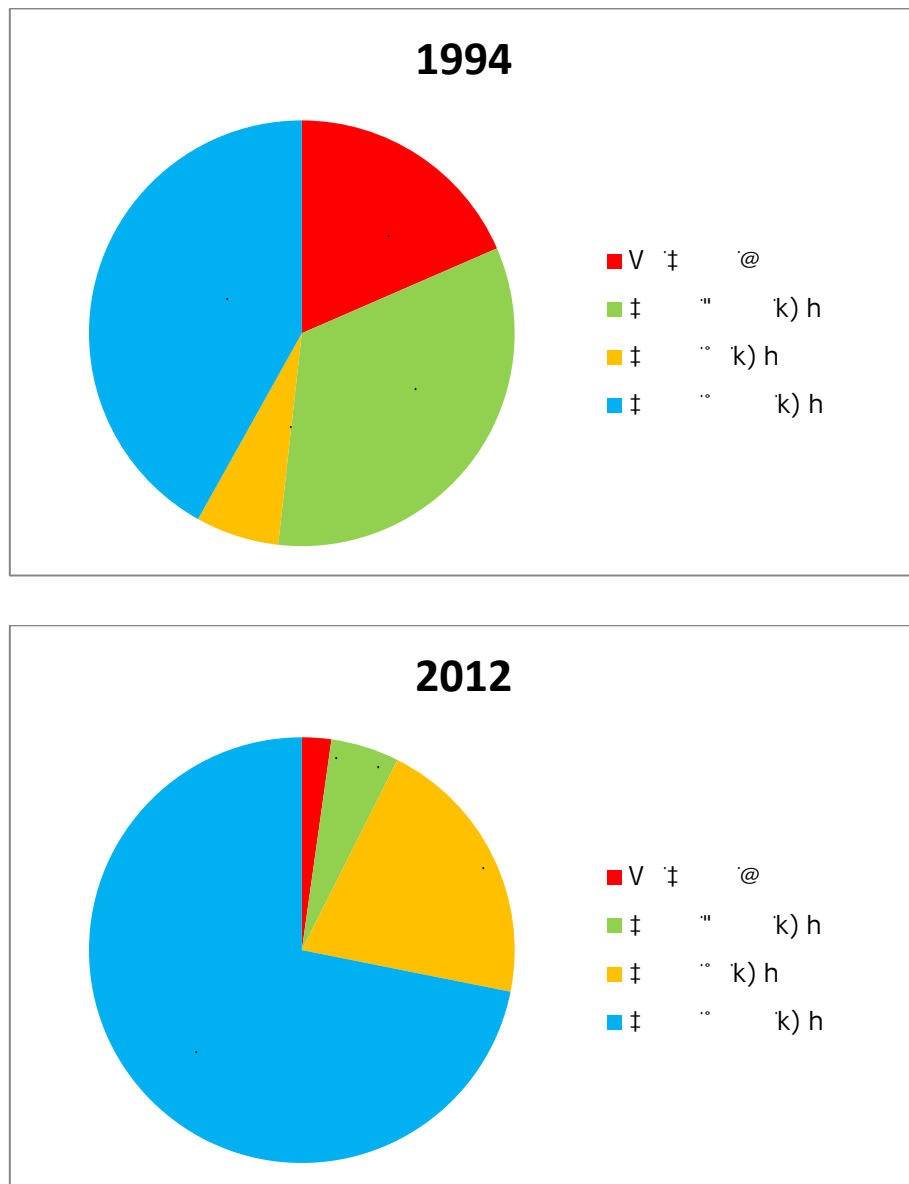


Figure 9: Percentage of South African population with access to different levels of water services in 1994 and 2012

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### 5.3.2. Access to potable water

**Goal 3.2: Access to water that is clean and safe to drink:**

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Quality of Drinking Water	
Colour Drop	Indication of Drop
	Blue Drop Certified, water safe to drink; complied excellently with national standards throughout the reporting period; Must have scored 95% on adherence to Blue Drop Requirements; Water must comply excellently with SABS 241; Water safe to drink.
	Water complied excellently with standard; safe to drink Micro > 97% Chemical > 95%
	Water safe to drink but some chemical parameter compliance requires improvement Micro > 97% Chemical < 95% (or no Information)
	Water generally safe to drink but with recorded some microbiological failures Micro < 97% Chemical > 95%
	Water did not comply according to expected standard targets Micro > 90% < 95% Chemical > 90% < 95%
	Compliance levels too low; there were extended periods when the water did not comply with standard / or no monitoring to confirm actual quality of tap water Micro < 90% Chemical < 90%

Figure 10: Blue Drop water quality assessment chart (Department of Water Affairs 2012, 1)

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**Table 10: National Blue Drop Assessment Analysis** (after Department of Water Affairs 2012a, 11)

National Blue Drop Assessment Analysis				
Category	2009	2010	2011	2012
Water quality	6.1	6.1	6.1	6.1
Water quantity	6.1	6.1	6.1	6.1
Water security	6.1	6.1	6.1	6.1

**Table 11: Provincial average Blue Drop scores for 2009 to 2012** (Department of Water Affairs 2012a)

Province	Provincial Average Blue Drop Score			
	2009	2010	2011	2012
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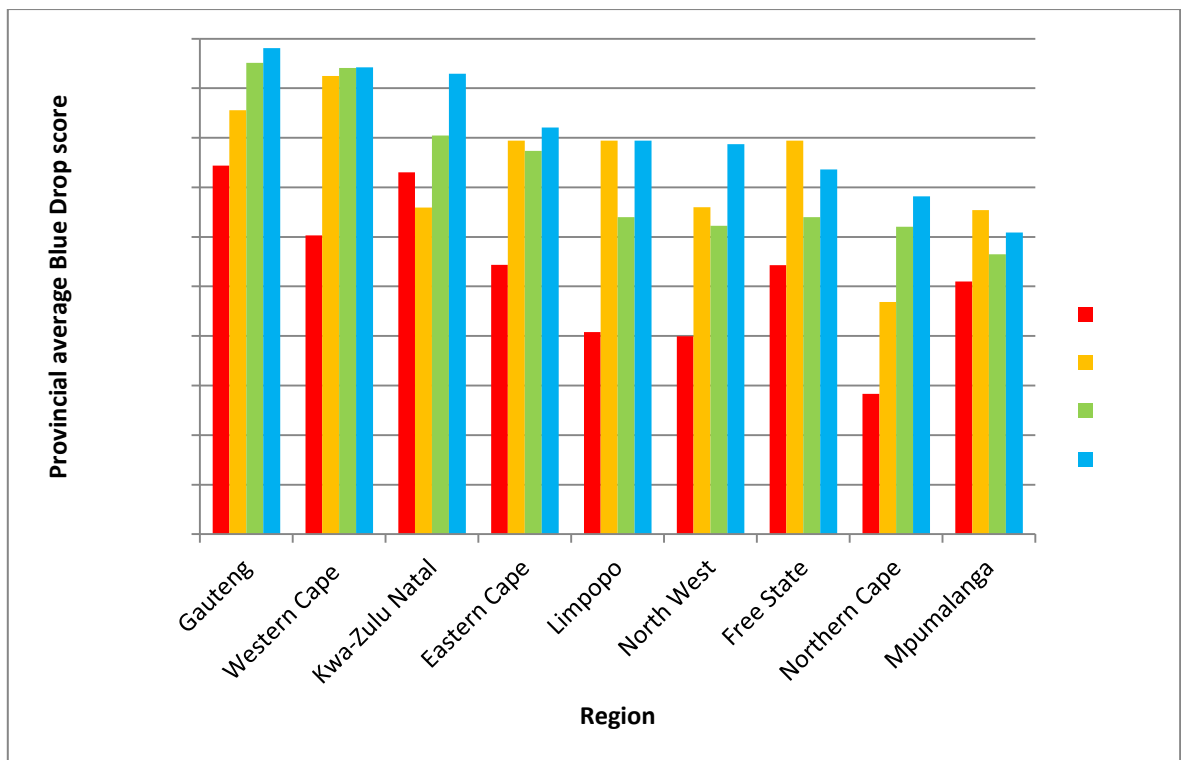


Figure 11: Blue Drop scores per province for 2009 to 2012

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### 5.3.3. Sufficient quantity

#### Goal 3.3: Minimum basic quantity:

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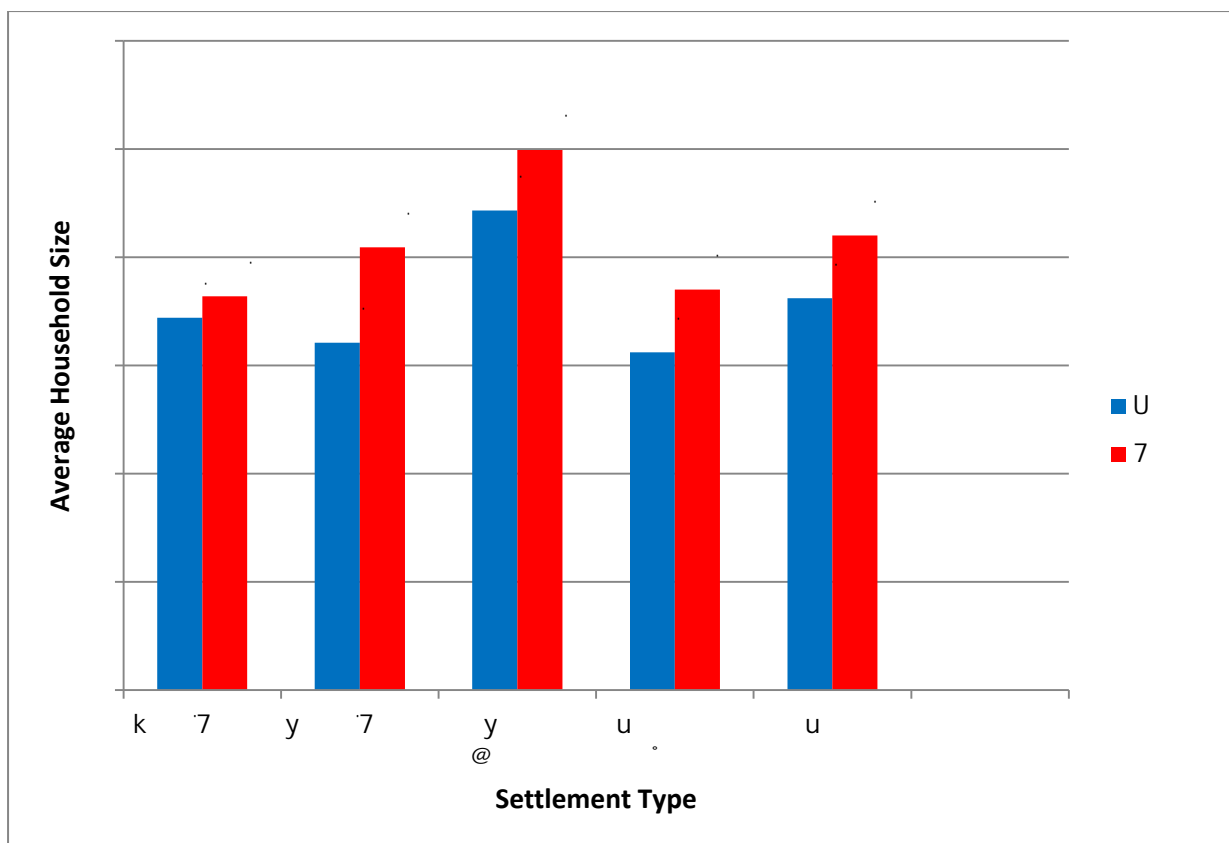


Figure 12: Average household size by type and gender of household head

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5.4. Goal 4: Reduction of service delivery inequalities

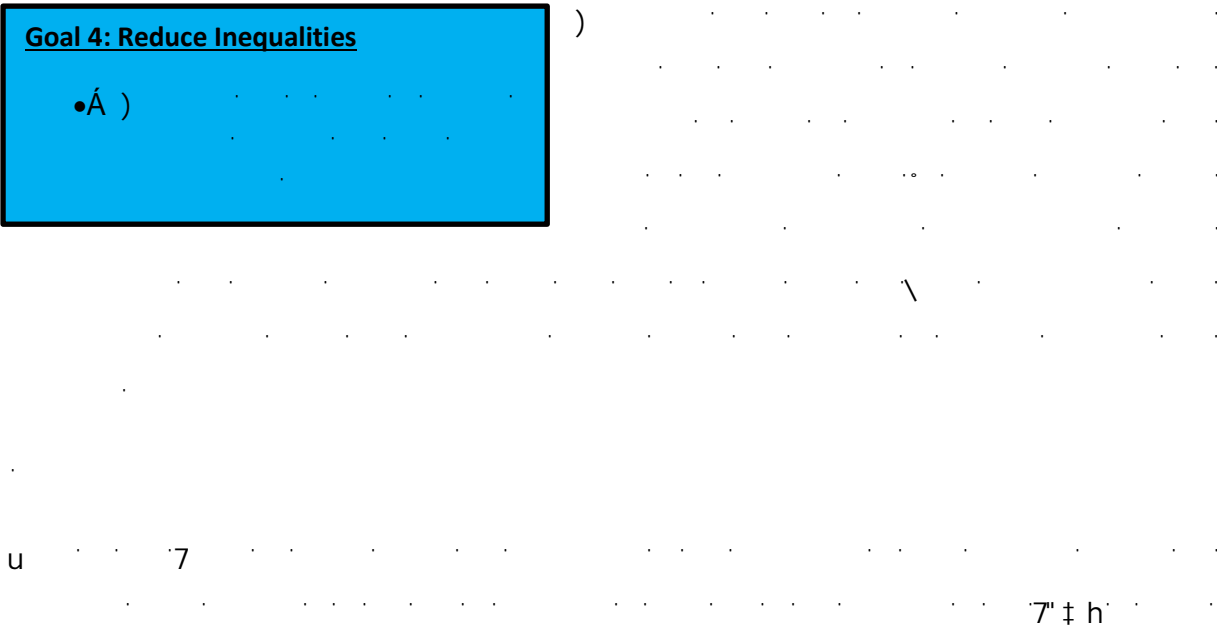
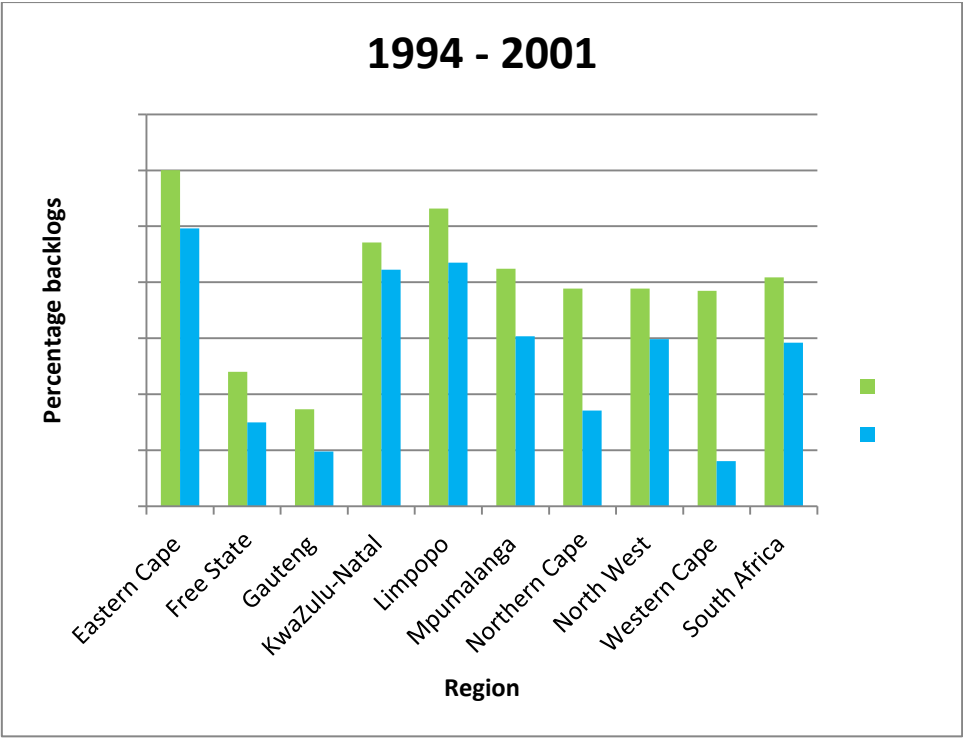


Table 12: Percentage of the population waiting for improved water services in 1994 and 2001 (after Department of Water Affairs, 2012b)

Region	1994	2001	% Improvement
Eastern Cape	60%	50%	
Free State	24%	15%	
Gauteng	17%	10%	
KwaZulu-Natal	47%	42%	
Limpopo	53%	43%	
Mpumalanga	42%	30%	
Northern Cape	39%	17%	
North West	39%	30%	
Western Cape	38%	8%	
South Africa	41%	29%	



**Figure 13: Percentage of the population waiting for improved water services in 1994 and 2001** (after Department of Water Affairs, 2012b)

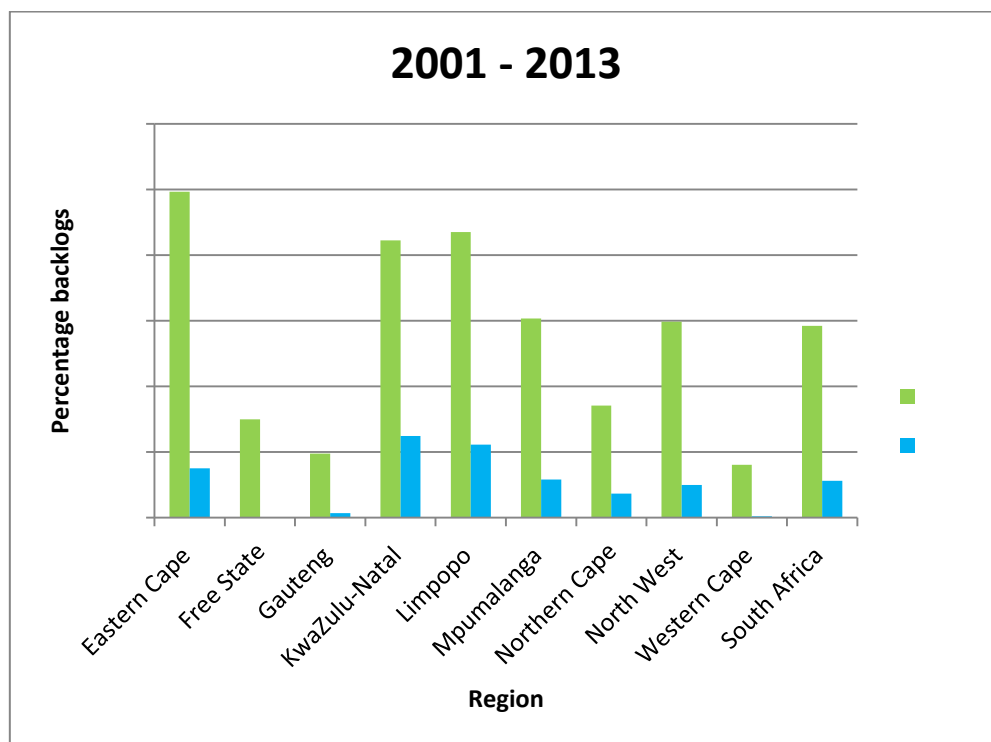
*Table 13: Population per Province in 1994 and 2001 (after Department of Water Affairs, 2012b; Statistics South Africa 2012)*

Region	1994	2001	% Growth
Eastern Cape	6 145 777.00	6 278 684.00	·
Free State	2 603 010.00	2 706 759.00	·
Gauteng	7 213 540.00	9 398 780.00	·
KwaZulu-Natal	8 204 218.00	9 584 247.00	·
Limpopo	4 524 950.00	4 994 505.00	·
Mpumalanga	2 879 656.00	3 351 740.00	·
Northern Cape	1 010 352.00	999 370.00	·
North West	2 612 894.00	2 981 456.00	·
Western Cape	3 706 910.00	4 524 325.00	·
South Africa	38 901 307.00	44 819 866.00	·



**Table 14: Percentage of the population waiting for improved water services in 2001 and 2013** (after Department of Water Affairs, 2012b)

Region	2001	2013	% Improvement
Eastern Cape	29%	8%	72%
Free State	29%	0%	100%
Gauteng	29%	1%	97%
KwaZulu-Natal	29%	12%	59%
Limpopo	29%	11%	62%
Mpumalanga	29%	6%	79%
Northern Cape	29%	4%	86%
North West	29%	5%	83%
Western Cape	29%	0%	100%
<b>South Africa</b>	<b>29%</b>	<b>6%</b>	<b>79%</b>



**Figure 14: Percentage of the population waiting for improved water services in 2001 and 2013** (after Department of Water Affairs, 2012b)

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**Table 15: Population per Province in 2001 and 2013** (after Department of Water Affairs, 2012b; Statistics South Africa 2012)

Region	2001	2013	% Growth
Eastern Cape	6 278 684.00	6 621 127.00	.
Free State	2 706 759.00	2 753 730.00	.
Gauteng	9 398 780.00	12 726 465.00	.
KwaZulu-Natal	9 584 247.00	10 454 479.00	.
Limpopo	4 994 505.00	5 517 101.00	.
Mpumalanga	3 351 740.00	4 127 484.00	.
Northern Cape	999 370.00	1 163 326.00	.
North West	2 981 456.00	3 599 585.00	.
Western Cape	4 524 325.00	6 017 247.00	.
<b>South Africa</b>	<b>44 819 866.00</b>	<b>52 980 544.00</b>	<b>18%</b>

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### 5.5. Goal 5: Monitoring and education

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### 5.5.1. Monitoring of FBW policy implementation

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## 5.5.2. Information and education on the FBWP and water use

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## 5.6. Goal 6: FBWP Implementation is sustainable

### Goal 6: Sustainability of service

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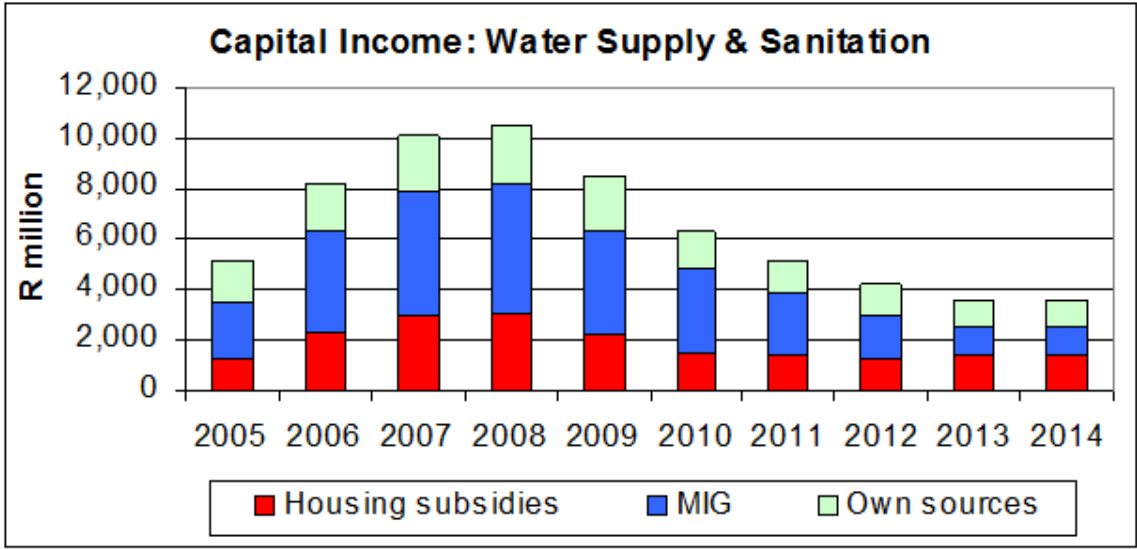


Figure 15: Capital finance required for water supply and sanitation )



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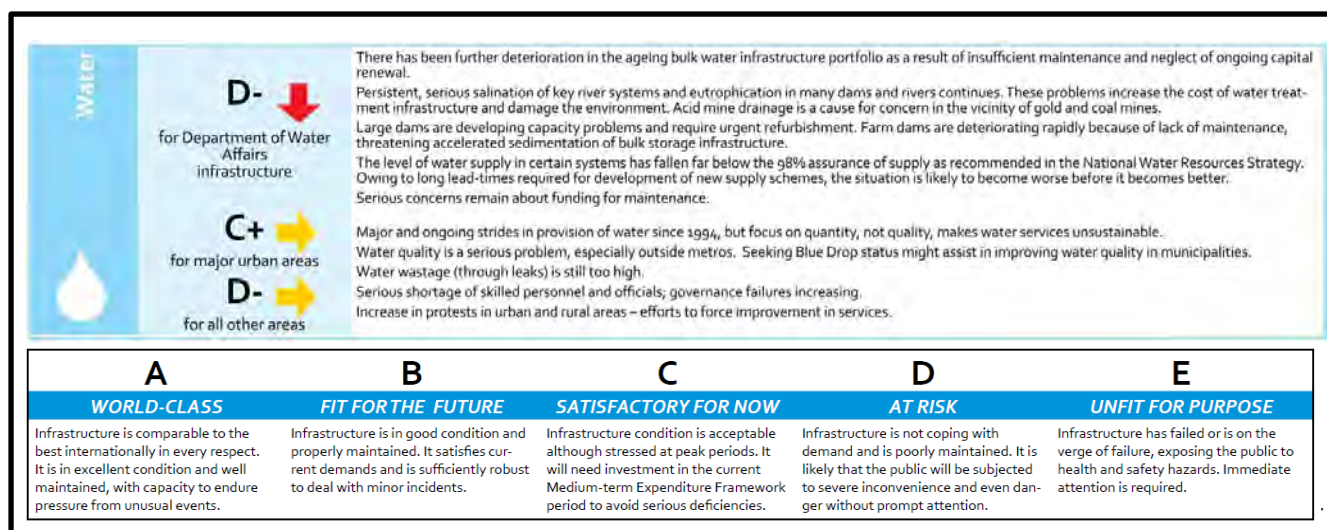


Figure 16: Extract from the SAICE Infrastructure Report Card (Water Sector) ○ @-

## 6. CONCLUSIONS

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### GOAL 1: Access to Infrastructure:

- Á 100% rudimentary supply by 2008,
- Á 100% RDP Standard by 2014

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### GOAL 2: Access to FBW:

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**Goal 3.2: Access to water that is clean and safe to drink:**

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**Goal 3.3: Minimum basic quantity:**

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#### Goal 4: Reduce Inequalities

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### Goal 5: monitoring and education

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### Goal 6: Sustainability of service

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## 7. RECOMMENDATIONS

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## Works Cited

1. U # ‡ Water Supply and Sanitation in South Africa: Turning Finance into Services for 2015 and Beyond. u ‡ o h
2. U K Synthesis of the 2005 Development Report: Overcoming underdevelopment in South Africa's second economy. k K Vh#\
3. U O ) = u ) U #
4. \ o
5. 8 o Consolidated General Report of the National and Provincial Audit Outcomes. h 8o
6. 7 Classes, Multitudes and the Politics of Community Movements in Post-apartheid South Africa. # # o k k V
7. = M k h o
8. University of Cape Town
9. h Basic Infrastructure for Socio-economic development, environmental protection and geographical desegregation: South Africa's unmet challenge. 8
10. # h # K ) K = u h U Improving Free Basic Water Provision in South Africa. U O 7 o h
11. # # o Mazibuko and Others vs. City of Johannesburg and Others. K U
12. # The state of municipal infrastructure in South Africa and its operation and maintenance: an overview. h #
13. ) = Viva Prepaids, Viva! @ h h U ) Cost Recovery and the crisis of service delivery in South Africa # u =ok# h
14. ) = # Cost recovery and prepaid water meters and the Cholera outbreak in KwaZulu Natal. @ h ) U ) Cost Recovery and the crisis of service delivery in South Africa # u =ok# h
15. ) 7 Growth, Employment and Redistribution - a Macroeconomic Strategy. h
16. ) h O 8 Study to determine progress with and challenges faced by municipalities in the provision of free basic services and supporting those municipalities struggling with implementation. h ) h O 8

- ) [Draft White paper on Water Services. h](#) )
- ) [Strategic Framework for Water Services. h](#) )
- ) [Free Basic Water Implemetation Strategy 2007: Consolidating and Maintaining. h](#) )
- ) [Blue Drop Report 2009: South African Drinking Water Quality Management Performance. h](#) )
- ) [2012 Blue Drop Report. h](#) )
- ) [V @ o k \ o](#)
- ) [Reports and Strategic Plans k koh](#)
- ) [7 V White Paper on Water Supply and Sanitation Policy. k o](#)
- ) [7 Free Basic Water k U](#)
- ) [7 Blue Drop Report 2009. h](#) )
- ) [Reports and Strategic Plans k koh](#)
- [8 K M h Domestic Water Provision in the Democratic South Africa - changes and challenges. y h](#)
- 7 [\ = What's Trust got to do with it? Non-payment of service charges on local authorities in South Africa. K U o](#)
- 7 [o K Rural areas in the Eastern Cape Province, South Africa: The right to access safe drinking water and sanitation denied? k K](#)  
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- 8 [K Politicians and Apartheid: Trailing in the people's wake. h =ok#h](#)
- 8 [h = Basic Water Requirements for Human Activities: Meeting Basic Needs. ‡ @ ‡](#)

8 U Assessing the Effective Demand for Improved Water Supplies in Informal Settlements: A Willingness to Pay Survey in Vlakfontein and Finetown, Johannesburg. 8

8 U How "water for all" policy became hegemonic: The power of the World Bank and its transnational policy networks. 8

8 O 7 Research shows sharp increase in service delivery protests. k U 8 \

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= ) ) ) " Water Services and Public Health: the 2000-01 cholera outbreak in KwaZulu Natal. ‡

= ) U U U M Rural Development: The provision of basic infrastructure services. h =ok# h

= K Mbeki's South Africa. 7

= k Evaluating Water Policy Scenarios against the Priorities of the Rural Poor. ‡ ) ‡

= V U K h ‡ Lessons for PRSP from Poverty Reduction Strategies in South Africa. © V V

© -o Development of a South African version of the International Infrastructure Manual: Scooping Report. © -o

K o Differentiating networked services in Cape Town: Echoes of splintering urbanism? 8

M k V Free water not a ploy. u ‡

M U U Facts, Fiction and Fabrication? Service Delivery in South Africa under Mandela. y 7

M h 8 ) \ K \ - K Migration in South and Southern Africa: Dynamics and Determinants. # u =ok# h

O U ‡ @U - = M # Employment and Inequality Outcomes in South Africa. # u o O ) k y

U 8 Court finds installation of prepaid water meters unconstitutional. k K U 8 \

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U K Poverty and Inequality in South Africa. # o ) o y V

U u Address to the 7th National Congress of Trade Unions. 8

U ) ) ° ° The bell tolls for thee.. @ ° h ) U ) Cost recovery and the  
crisis of service delivery in South Africa # u =ok#h

The Theory and Practice of Cost Recovery in South Africa

Cost Recovery and the Crisis of Service Delivery in South Africa

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U ) ) ° · k '8 · Alternatives to privatization: Public options for essential services in the global South. h =ok#h ·

U M k o - t t The State of Non-Revenue Water in South Africa.  
h u t k #

U M ) ) Water is life: The Anti-Privatisation Forum and the struggle  
against water privatisation. k o k h  
V

*On Tap: a review of the Free Basic Water Policy.*

*Towards a means to live: Targeting poverty alleviation to make children's rights real.*

U O Flood of water protests. k u

*Free Basic Water - a sustainable instrument for a sustainable future in South Africa.*

Uluwatu Mvula Trust k'obw'

V V o K Democracy and Distribution in Highly Unequal Economies: The Case of South Africa. K U o t . . . . .

V U U U Communication Policy. h V

V                    o                    SACC - RDP houses uninhabitable. k                    o

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V. The Value of Water in the South African Economy: Some Implications.

V o \ 'IOL News South Africa.'k 'K ' ' ' @OV

# Cost Recovery and the Crisis of Service Delivery in South Africa.

h K' *The Struggle against encroachment: Constantia and the defense of White Privelege in the "New" South Africa.* @° h ) U ) *Cost Recovery and the Crisis of Service Delivery in South Africa* # u =ok#h

h o ° *White Paper on Reconstruction and Development.* # u 8 8

h o ° *Millennuim Development Goals: Country Report 2010.* h h o °

h " 7 *RDP housing and sanitation falling short, Rights body tells Parliament.* k o " ) O

h y u k ) u K' *Democtracy and Delivery: Urban Policy in South Africa.* # u o °

j K *Quandl.com* k U [† \kQ " ° VM-° 7 o@h\† 8@/ @ 8@/ @](#)

k o ° ) *Water Services Act.* h 8 8

k o ° *Municipal Systems Act.* h 8 8

k # *Funding models for financing water infrastructure in South Africa: Framework and Critical Analysis of Alternatives.* h #o@

k 8 *Debt, Disconnection and Privatisation* @° h ) ° *Cost Recovery and the Crisis of Service Delivery in South Africa* # u =ok#h

o° @- *SAICE Infrastructure Report Card 2011.* K o° @-

o K' *How much water is enough? Domestic metered waterconsumption and free basic water volumes: The case of Eastwood, Pietermaritzburg.* h = o k # # o )

o ° V u *Chapter 12: Delivering Municipal Services in Rural Areas* @ @ 7 k

o o ° *Census 2001.* h o o °

o o ° *Monthly Earnings of South Africans 2010.* h o o °

o o ° *Census 2011.* h o o °

o o ° *Income and Expenditure of Households 2010/2011.* h o o °

o o "Poverty Profile of South Africa: Application of the Poverty Lines on the LCS 2008/2009." h o o "

o o "Mid-year Population Estimates 2013." h o o "

o o "National and Provincial Labour Market: Youth - Q1 2008 to Q1 2014." h o o "

o k o "7 Constitution of the Republic of South Africa Act 1996." k U "8 @

o ) " " U V "Asset Management for the Water Services Sector in South Africa." K ‡ k #

u " o " \ "Limpopo's RDP houses from hell - DA." k o " h

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y V ) h "Millennium Development Goals Report 2013." V ' y V

† " o "Public spending and the poor since the transition to democracy" @ = " k M "Poverty and policy in Post Apartheid South Africa" # u =ok#h

† M " K V U ) K "Redressing Racial Inequities through Water Law in South Africa: Interaction and Contest among Legal Frameworks." @ ‡ U @ " k h

‡ U - "Reversing privatisation, rebalancing government reform: Markets, deliberation and planning" h o ‡

‡ @ "Respect, Protect, Fulfil: The implementation of the human right to water in South Africa." ‡ o k 8 @ - k

‡ = \ "WHO Country Operation Strategy - South Africa 2008 - 2013." ‡ =\ # \ o ‡ =\ k \

‡ = \ "The Right to Water." ‡ =\ O # @ h )

Æ U "They are Killing us Alive" @ " h ) U ) "Cost Recovery and The Crisis of Service Delivery in South Africa" # u =ok#h

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**Examiner 1:**

*The study investigates the implementation of Free Basic Water (FBW) in South Africa to date. The dissertation was submitted as a complete fulfilment of the degree requirements (i.e. no coursework was done), which increases the credit value and thus the level of work expected from the candidate.*

- *Á From the start the exact aim of the thesis and how it will be met are defined ambiguously, making impossible to judge whether the research has been done successfully or not: on page 13 in the introduction to the thesis, the primary objective of the research is defined by the question: “is FBW being successfully implemented or not?”. To answer this question the candidate aimed to define a “checklist” of performance indicators against which the free basic water policy was to be tested. The test for answering the question is given as whether “the policy meets the criteria” – if this is the case, it can be said “that it is being effectively implemented”.*
- *Á However in the next paragraph the candidate states a different test for the success of the policy: “in order to claim that the FBW implemented successfully, it will have to be shown that FBW is implemented fast enough that the 2014 goals can realistically be met.” While the differences in these two tests may seem small, they are very significant, and this has important implications for how the success of the policy can be shown, and indeed whether the research is successful or not. Testing whether the policy meets the criteria and is successfully implemented, is not the same as testing whether the 2014 goals can realistically be met. Admittedly there will be large overlaps in answering these two questions, but it is very difficult to judge the success of the research without knowing unambiguously how it aimed to achieve its set goal. One can assume that the candidate meant to use both*



***The aims of the research are not clearly or unambiguously defined:***

[illegible]

- *Additional aims are then defined i.e. to investigate whether people are getting access to water supply systems that are of an “acceptable minimum standard”, has “good” water quality and are “reliable”. The link between the additional aims and the research question are not made, and it is not sure whether these are just part of that aim, or simply interesting questions that the candidate wanted to investigate.*

- *“The goals of the work are again defined in Chapter 2 (page 14) as follows: “if it can be shown that FBW implementation is achieving the desired effects within the conditions specified by the policy, it can be deemed successful.” And then “both the negatives and positives were analysed and measured against each other, as to answer the question it must be shown that the positives significantly outweigh any negative factors.” This further complicates the document. First it is stated that FBW is successful if it meets the criteria in the checklist, but now it seems that to answer the question of the success of FBW, the positives must outweigh the negatives.*

- *The aim of the thesis is again stated on page 15 as being to “determine whether or not the policy is being effectively implemented.” There is a difference between the implementation of the policy on FBW and the implementation of FBW. Ideally these should be in line, but in practice this is often not the case.*

- *“The aim of the thesis is again stated on page 15 as being to “determine whether or not the policy is being effectively implemented.” There is a difference between the implementation of the policy on FBW and the implementation of FBW. Ideally these should be in line, but in practice this is often not the case.*

- *“The aim of the thesis is again stated on page 15 as being to “determine whether or not the policy is being effectively implemented.” There is a difference between the implementation of the policy on FBW and the implementation of FBW. Ideally these should be in line, but in practice this is often not the case.*

- Á On page 22 it is stated that “qualitative data taken from interviews with the affected population can be used in conjunction with historical statistics to track changes in living standards due to the implementation of the FBW policy.” However, changes in living standards are not necessarily related to FBW, and thus it is not clear why living standards should be incorporated into the study.

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- Á Another definition of the success of the policy is given on page 39: “the policy can only be successful provided it is achieving its objectives in such a way that the failures are minimized”
- Á Another definition of success is given on page 40: “it can be deemed that FBW is a success as it adheres to the conditions and goals set out in the legislation.
- Á On page 46 it is stated that “Thus for FBW to be deemed successful, the number of people with no or minimal access to services must be reduced to zero by 2014”
- Á On page 80 it is stated that “if it can be shown that FBW progress is occurring at a rate that will achieve its goals within the time constraints, it can be considered successful.”

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***The development of the research from the aims through the research methodology (checklist, methodology, literature review, results, analysis) to the conclusions is not clearly and logically done.***

- ***Á*** *Even though the legal requirements of FBW are critical to the objectives of this project, these requirements are never explained and discussed. This is also true for the less important requirements of the Millennium Development Goals.*

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- ***Á*** *On page 13 it is stated that a quantitative approach will be used, while on page 15 it is stated that both qualitative and quantitative approaches will be used.*

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- ***Á*** *The “methodology” in chapter 2 is given before any literature is discussed. Thus the reader is left without any context to understand the motivation for these questions.*

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- ***Á*** *Chapter 2 uses a set of questions that are used to “assess the impact and progress of the implementation”. However no motivation, source, context or even references are provided. Some of these questions are very open-ended or clearly outside an engineering students area of expertise. For instance: “are these procedures constitutional?” Surely it will take a constitutional expert or a student with a legal background to attempt to answer such a question, and thus it would be better to exclude such tests from the study.*

- *It is not clear how the questions relate to the main research question, and thus how, when they are answered, the research question is also answered. Such a link should be clear and explicit.*

- *#*

- *In Chapter 4 several criteria and sub-criteria are developed. There is no motivation given for why these criteria are chosen or how they relate to the project goal. Some, like criterion 1, are very large in scope and cannot be realistically done in a single study such as this. Some, like criterion 3, are not testable criteria at all. Many of the criteria are ambiguously defined, and it is not clear how one would be able to show adherence to them. It is not always clear what is the criterion, and what is the sub-criteria, for instance see criterion 5.*

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- *The evidence and discussions made to show compliance to the criteria above are often not convincing.*

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- *The conclusions do not link all the goals and evidence to round off the thesis. Some issues, such as minimum standards, water quality and reliability (page 13) are not addressed adequately.*

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***There is insufficient evidence of critical evaluation of the source data and reference documents used in this study:***

- Á *The sources of data are listed on page 17, but no detail is given on what data is obtained from which source, how this data was collected, the scope and limitations of the data etc.*

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- Á *On page 20, four parameters are defined that “were investigated before data collection and analysis”, pertaining to the volume, complexity, detail and flexibility. However, no evidence or results are provided for these investigations.*

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- Á *On page 21, a list of methods on which “the research method is based” is given and discussed. However, few of these methods are evident in the dissertation. It seems to be a discussion about how the research is done rather than about how “data collection and analysis” was done in this study.*

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- Á *On page 21 it is stated that “case studies are particularly relevant for this thesis”, but I can’t recall having read any case studies in the document*

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- *Á On page 26 it has stated that the unemployment rate has risen “to nearly 40% in recent years” while on page 71 a graph is shown where the unemployment rate never exceeds 27%. This difference is neither acknowledged nor discussed in the document.*

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- *Á On page 26 the following is claimed for the World Health Organization’s Millennium Development Goals: “one such goal was to ensure clean, safe drinking water to all people by the year 2015”. The source of this statement is the SA Government rather than the WHO directly, and in addition does not seem to be an accurate description of the Millennium Development Goals.*

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- *Á On page 28 it is claimed that the Free basic Water policy developed in 2000 (i.e. in the new South Africa) based the amount of free water allocated to households based on a crude method of used under Apartheid i.e. “a 200 litre drum of water per day.” It seems highly unlikely to me, given the fact that the policy was developed under the new dispensation, that the developers would have used such a crude and dehumanizing method. Surely such a claim should be investigated and not simply accepted as the truth?*

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- *Á Data is presented on page 36 without any reference to its source, critical evaluation of its applicability or description of how the tables were compiled. If the data was provided by*

*government, can it be trusted in order to do an independent evaluation of progress with FBW?*

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•Á *Projected data points seem to have been added to Figure 4.1.3. These make the trends look far more certain than the data actually shows. It seems unlikely that service delivery rates are able to continue at the same rate right up to the 100% mark, since the most difficult areas are typically left until last, and thus the rate of delivery can be expected to slow down. Figures 4.1.1 and 4.1.2 show a slowing down of the rate of service delivery, contrary to what the candidate claims.*

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•Á *The discussion on page 53 suggest that the water quality in South African municipalities is excellent, which seems contrary to many press articles and my own experience. Certainly more sources are available to give a broader view of this issue?*

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- Á On page 85 it is stated that "as with most prices, however, the tariffs have increased every year, and the percentage they have been raised by is consistently higher than the increase in the Consumer Price Index." However the only references I could see in the text to water increases were two figures for increases over single years. This hardly represents a consistent pattern.

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- Á Much of the conclusion chapter sounds like the candidate is trying to praise the policy implementation rather than give a balanced and critical evaluation.

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- Á The candidate makes certain claims that are not supported by either references to previous work or an analysis of the data. Several (although not all) examples are highlighted in a separate document.

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## **Examiner 2:**

The dissertation by Farrar, L titled "Is the free basic water policy working? A study on the implementation of free water services in South Africa" is a research question definitely worth answering in a Masters dissertation. The research carried out in order to answer the above question should ideally provide decision makers at all levels of government and stakeholders with and

*independent assessment of the implementation status and spin-offs of a promise made to the South African people more than a decade ago, but more so, on governments' obligation to provide a basic service which is vital to life. I salute Lauren Farrar who has undertaken this task.*

*I have provided specific comments on the dissertation which is being returned so the candidate can easily address comments, corrections etc. However, below are my brief overall comments on the dissertation:*

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*As indicated above, the dissertation fits into one of the forms of research approved by the UCT Faculty vis-à-vis a "critical review of a specific topic based upon a comprehensive search of the literature or available data". The candidate has embarked on this research which has mostly been based on literature and published data. The dissertation is however deficient in the following:*

- *Á Literary style – I have repeatedly, and in many instances, extensively corrected and commented on poor grammar and punctuation (see dissertation). The grammar especially requires significant reworking to bring the literary style to a level acceptable for a Masters dissertation. In addition, the candidate often combines several distinct thought/issues (often discussed shallowly) within a paragraph with minimal, if any, connection between them (e.g. see 1<sup>st</sup> paragraph of section 3.3). The often mixture of past and present tenses has also made reading difficult.*

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- *Á Citation and referencing – Several citation conventions (see below for examples) are present within the text and within the references section. I have annotated many of these within the*

dissertation. In addition, poor or no citation and documentation of references can be seen in several instances (e.g. on tables and figures) within the document:

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#### Citations:

- Á (Punch 1998) or (Punch, 1998)
- Á (Romano, et al. 2003) – comma after Surname?
- Á (World Bank 2000/2001) (Van Koppen, Jha and Merry 2003) – is this supposed to be the format for citing 2 references?
- Á (D.A. McDonald, 2002) – Initials in citation?
- Á (Romano, et al 2003) or (Earle, Goldin and Kgomo 2005?)
- Á (May, Poverty and Inequality in South Africa 2005) – titles in citation?
- Á (data from DWAF annual report 2004) – is this a citation?
- Á (taken from the 1995 general household survey) – is this a citation?
- Á (Bond, Z-space 2006) – is this a citation?

#### References:

- Á -. “Z-space.” 13 February 2006. <http://www.zcommunications.org/municipal-elections-wont-appease-furios-south-africansby-> (accessed September 4, 2011).
- Á Anand, P.B. “Is the Millennium Development Goal (MDG) for water and sanitation on track? “Target 10” Revisited.” *International Journal of Technology Management and Sustainable Development*, 2006: 197-209.
- Á Barchiesi, Franco. “Classes, Multitudes and the Politics of Community Movements in Post-Apartheid South Africa.” *Centre for Civil Society Research Report No. 20*, 2004.

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**Further comments:**

- Á *In Chapter 4 (The section of the dissertation that is to provide a detailed analysis of the Free Basic Water Policy), there is missing a detailed review of the sections, clauses of relevant legislation and political history that contextualise the development of the free basic water policy e.g. its first mention, then inclusion in the RDP manifesto, then inclusion in the Water Acts and then part of Thabo Mbeki's September 2000 ANC local government manifesto etc...*
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- Á *How were the 6 criteria developed or where were they obtained from? The beginning of the chapter with the 6 criteria which are not referenced to any document could have been better done.*
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- Á *Several instances of cross-referencing is vague and should be specific e.g. "as shown in the literature review (chapter 3" or "as mentioned earlier (refer to page 64).."*
- Á U @
- Á *Racial classification- this is a less significant issue for the candidate to give attention to, but is deemed important to correct in the dissertation. By providing classification of race according*

*to African, White, ... there seems to be a connotation that White and African are mutually exclusive. I think not. Rather use Black in place of African.*

- Regarding the issue of racial classification – I referred to the government’s racial classification as referenced in the BBBEE Act, which defines “black” as all races that are non-white (i.e. African, Indian, Coloured etc.) and so I have chosen to use this method, and refer to “White”, “African”, “Indian” and “Coloured” in the dissertation, with an explanation of where the classification comes from.
- *Benchmarking current practice/policies/processes with many of the sub-criteria from pages 45 are often shallow and could have been better researched (see comments in sections 4.1.3, 4.2.1, 4.3.2, 4.5.2 and 4.6.1.)*
- I have completely rewritten the dissertation and removed the criteria and sub-criteria and instead discuss the goals of FBW implementation, and I have done more extensive research to ensure that each goal is discussed in depth.
- *Chapter 6 is mostly a repetition of discussion carried out in chapters 4 and 5 and mostly NOT A COMPARISON between the shortcomings of the FBW policy/implementation and its successes. The chapter fails to explicitly layout a template for comparing shortcomings with successes.*
- I have completely rewritten chapter 6, and have taken a far more critical view of the implementation of the FBWP, and discuss the areas where it has succeeded in achieving its goals and the areas where it has failed in achieving its goals rather than simply praising the policy.
- *To be consistent with terminology, the UCT faculty refers to the report as a “dissertation” not a “Thesis” as is regularly stated by the candidate.*
- I have corrected this throughout the dissertation.